THE opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte SCOTT D. AUGUSTINE and DOUGLAS J. AUGUSTINE

Application 08/855,061

ON BRIEF

MAILED

SEP 3 0 2004

U.S PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

Before ABRAMS, FRANKFORT, and PATE, <u>Administrative Patent Judges</u>.

PATE, <u>Administrative Patent Judge</u>.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 20 through 23 and 25 through 39. Claim 24, the only other claim in the application, has been allowed.

The claimed invention is directed to an inflatable cover for controlling the temperature of a person. The cover is comprised of inflatable tubes that inflate to provide an elongated,

parallel mutually conducting tube structure that is self erecting over the patient. Apertures on the bottom side of the tubes vent the temperature controlled air around the patient.

For a further understanding of the claimed subject matter, reference is made to appealed claim 20, a copy of which is appended to appellants' brief.

The references of record relied upon by the examiner as evidence of anticipation and obviousness are:1,2

Hardy	3,714,947	Feb.	6,	1973
Moore et al. (Moore)	4,114,620	Sep.	19,	1978
Augustine et al. (Augustine)	4,572,188	Feb.	25,	1986
Roehr	113,420	Jul.	18,	1994
(European Patent)				

THE REJECTION

The examiner has rejected claims 20, 21, 22 and 34 under 35 U.S.C. § 102(b) as anticipated by Roehr.

The examiner has rejected claims 23, 25, 26, 27, 28, 29, 30 and 31 under 35 U.S.C. § 103(a) as unpatentable over Roehr.

We note that the examiner has cited the patent to Moore as additional evidence, but has not included the patent to Moore in the statements of any of the rejections. This patent along with the appellants' cited patent to Wales and the declaration by Andreas Deibel have been considered in the formulation of our decision hereinbelow.

² Our understanding of the Roehr reference comes via an English language translation already of record in the file.

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The examiner has rejected claims 32 and 33 under 35 U.S.C. § 103(a) as unpatentable over Augustine in view of Roehr.

The examiner has rejected claims 35 and 36 under 35 U.S.C. § 103(a) as unpatentable over Roehr in view of Hardy.

The examiner has rejected claims 37 through 39 under 35 U.S.C. § 103(a) as unpatentable over Augustine in view of Roehr and Hardy.

For a further understanding of these rejections and appellants' arguments in response thereto, reference is made to the appeal brief and the reply briefs and the examiner's answer and supplemental examiner's answer for the full details thereof.

DECISION

We have carefully reviewed the arguments of the appellants and the examiner. As a result of this review we have made the following findings of fact and conclusions of law. The following represents our findings of fact with regard to the scope and content of the prior art and the differences between the prior art and the claimed subject matter.

Roehr discloses a cover for controlling the temperature of a person in a horizontal position by warmed or cooled air. The cover comprises a base sheet 11 which may optionally be a fabric lined with a plastic foil. We note that the dictionary definition

of fabric is a cloth made by weaving, knitting or felting fibers. Therefore it is our finding that the lined base sheet of Roehr is a laminated structure of fibrous material with a plastic foil upper surface. An overlying sheet 111 of the same material is also provided. The cover of Roehr is fabricated by folding a long rectangular piece of material and welding or glueing 15 (as at 12a, 12b, 12c) the three sides of the periphery that do not include the fold 12. Interior portions of the overlying sheet and base sheet are attached to form a "channel system" 20 with "multiple interconnected duct-like sections 21."

The cover of Roehr also includes exit vents or apertures 25 through which heated or cooled air is exhausted from the cover. The examiner further states that an opening 30 is provided in what could be used as a foot end of the cover, and a small uninflatable portion is defined around the periphery of the cover by the weld 15 being located inwardly of the cover edge. We concur with these findings.

Finally, as to the inflatability of the cover of Roehr, it is clear that the cover is provided with warmed or cooled air at greater than ambient pressure so that air may be exhausted

³ Random House Dictionary of the English language, Second Unabridged Edition, 1987, New York, New York.

through apertures 25 surrounding the patient. In our view, inflatability merely indicates that the cover is filled with gas at a higher than ambient pressure. We find it apparent that the duct-like sections or interior space 13 of the cover of Roehr are held open by air pressure. The cover of Roehr is inflatable much as a tire or the like is inflatable. Thus, it is our finding that the examiner has given the claim term "inflatable" its reasonable and customary meaning. The examiner's finding that Roehr is inflatable is reasonable and we hold that the burden has been shifted to appellants to provide evidence that Roehr is not inflatable. Appellants have not provided such evidence.

A patent is invalid for anticipation if a single prior art reference discloses each and every limitation of the claimed invention. Schering Corp. v. Geneva Pharmaceuticals Inc., 339

F.3d 1373, 1377, 67 USPQ2d 1664, 1667 (Fed. Cir. 2003) citing

Lewmar Marine, Inc. v. Barient, Inc., 827 F.2d 744, 747, 3 USPQ2d 1766, 1767 (Fed. Cir. 1987). Moreover, a prior art reference may anticipate without disclosing a feature of the claimed invention if that missing characteristic is necessarily present, or inherent, in the single anticipating reference. Id. citing

Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268, 20

USPQ2d 1746, 1749 (Fed. Cir. 1991).

Considering our above noted findings of fact, it is our finding that Roehr discloses each and every limitation of the claimed subject matter of claims 20 through 22 and claim 34. Appellants first argue that Roehr does not use the German word for laminate or inflatable in his disclosure. However, it is the actual disclosure of Roehr that is the measure of anticipation not the literal words used in the description. Roehr does not have to use appellants' terms in haec verba for anticipation to be established in the prior art.

Appellants have continued the argument that the cover of Roehr is not inflatable. Appellants seem to be of the opinion that the recitation of "inflatable" indicates that the sheets of the claimed cover must be of such a flexibility as to be distended when the subject thermal blanket is filled with air. As we noted above, we are in agreement with the examiner that the tubes of Roehr are supplied with air at a pressure that is higher than ambient pressure to insure that air will flow out over the covered patient. We are further in agreement with the examiner that the tubes of Roehr are held open by air pressure, and that the cover of Roehr is inflatable to the same extent that a tire

or the like is inflatable. We are convinced that this is a reasonable and customary meaning of the term when it is given its broadest reasonable interpretation.

Appellants further argue that just because a higher than ambient pressure air flow is used does not necessarily result in an inflatable structure. The appellants analogize to an air duct that does not inflate although it has air at a higher pressure flowing therethrough. However, it must be noted that the duct contemplated by appellants is undoubtedly a rigid structure that cannot expand due to the higher pressure. Roehr, in fact, is disclosed as a flexible cover of layers of plastic sheeting and fabric which is amenable to inflation. It is clear that the material that Roehr is constructed of is designed as intended to drape or conform to a person seated or lying thereunder.

Finally we credit the examiner's argument that at least at some pressures and mass-flow rates the plenums or chambers formed by the structure of Roehr become somewhat distended. This filling of pressurized air and the subsequent distention or spreading away from one another of the layers of Roehr's cover fits the reasonable and customary meaning of inflatable.

As noted above in our factual findings, Roehr disclose "two layers welded or glued together . . . the layers consisting of weldable plastic foil or of a fabric lined with plastic foil."

For two reasons we have found that the fibrous material is on the exterior and the flexible plastic foil is on the interior and forms the upper surface of the lower layer. First, the use of the term "lined" indicates to us that the plastic fabric is to be placed to the interior of the cover. Secondly, the use of the term welded indicated that the plastic foil faces the interior and forms the upper surface of the lower layer which is welded by well known plastic joining methods to the interior ply of the upper layer.

We acknowledge the appellants' argument that the layers of Roehr are not laminated. However, the argument is not credited. We find ourselves in agreement with the examiner that Roehr shows two layers: a fabric layer, and an inner plastic foil which provides the upper surface. We note the dictionary definition of laminate is: "to construct from layers of material bonded together", or "to cover or overlay with laminae." Id. We are of the view that a fabric layer lined with a plastic foil is a laminated structure or a laminate given this term its broadest reasonable definition. Additionally, the Examiner has apparently

cited the patent to Moore to show the art recognized meaning of the term laminate. We note that appellants discuss the Moore reference, even though the examiner does not list the reference in the list of cited prior art. To the extent that the examiner is relying on this reference to show the art recognized meaning of the term laminate, we agree that Roehr discloses a laminate structure.

Turning to a consideration of claims 23 and 25 through 31, the examiner has rejected these claims under 35 U.S.C. § 103 as unpatentable over Roehr. With respect to claim 23, the examiner has stated that, "paper is commonly known as a substitute for fabric when it is desired to make an article disposable."

However, we are in agreement with appellants' argument that there is no suggestion to modify Roehr in such a manner as to yield an inflatable cover in which a laminated base sheet includes an under layer of "paper." We further agree that there is no suggestion or even a mention of disposability with respect to the Roehr disclosure, and the examiner has not provided a cogent reason why one of ordinary skill would consider disposability in conjunction with the Roehr device. Thus, based on this evidence, we do not find any suggestion or motivation for the examiner's

proposed modification of the material of Roehr. The rejections of claims 23, 28, and 31, all of which are drawn to a paper fibrous layer are reversed.

Under the provisions of 37 CFR § 41.50(b) we enter the following rejection. Claims 21 and 26 are rejected under 35 U.S.C. § 112, second paragraph. These claims include limitations which contradict limitations found in the independent claim from which they depend.

All words in a claim must be considered in judging the patentability of that claim against the prior art. If no reasonably definite meaning can be ascribed to certain terms in the claim, the subject matter does not become obvious—the claim becomes indefinite. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Our analysis of the claims indicates that considerable speculation as to meaning of the terms employed and assumptions as to the scope of such claims needs to be made. A rejection under 35 U.S.C. § 103 should not be based on such speculations and assumptions. In re Steele, 305 F.2d 859, 862, 134 USPQ 292, 295 (CCPA 1962); Ex parte Head, 214 USPQ 551 (Bd. Pat. App. & Int. 1981). Accordingly, we reverse the 35 U.S.C. § 103 rejection of claims 21 and 26 and enter the rejection noted above. It must be noted, however, that

this is a technical reversal, based on the indefiniteness of the subject matter, and is not to be construed as a reversal based on the prior art cited by the examiner.

Turning to a specific consideration of the claims, we note that claim 20 requires that the inflatable cover includes an opening near a foot end for admitting warm air to the inflatable structure. However, claims 21 and 26 require that the opening be in the center of the inflatable structure. While the term "center" is most properly reserved for a circle or sphere, with respect to a polygon such as the rectangular cover, the center might properly be understood as the intersection point of the diagonals. At any rate, it is somewhere in the middle of the structure. Consequently, the inlet cannot be located both at the "center" and near the "foot end."⁴

As noted above, the examiner has rejected claims 27, 29 and 30 under 35 U.S.C. § 103. We concur with the examiner's finding that Roehr discloses a space between the overlying sheet and the

⁴We note in passing that while appellants' argument that the inlet end of Roehr is not on the central axis is true, it does not militate for patentability. The distance from the central axis to the inlet of Roehr is seen to be a *de minimis* feature and the placement of the inlet in this location is considered a mere design choice obvious to one of ordinary skill barring any unexpected result.

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upper surface of the base sheet and that the base sheet has an upper layer of plastic. The rejection of these claims is affirmed.

The examiner has rejected claims 32 and 33 under 35 U.S.C. § 103 as unpatentable over Augustine in view of Roehr. agree with the examiner's finding that Augustine discloses a plurality of elongate, parallel, mutually conducting tubes and comprises a self erecting structure, it is not our view that the teachings of the applied references can be combined as suggested by the examiner. The examiner is of the view that it would have been obvious to use fabric/plastic laminate of Roehr in the cover of Augustine. The examiner premises this combination on human comfort. In this regard there is no evidence in either reference to support the examiner's supposition. There is no teaching in Roehr regarding comfort, and it is speculation on the examiner's part that the material used by Roehr is more comfortable. After all, Roehr teaches two materials a plastic and a fabric lined with plastic. Roehr does not differentiate between the materials in his disclosure, let alone support a finding that one is preferred or more comfortable for a user than the other. rejection of claims 32 and 33 is reversed.

Turning to the rejection of claims 35 through 39 under 35 U.S.C. § 103, we affirm the rejection of claims 35 and 36 and reverse the rejection of claims 37 through 39. With respect to 35 and 36 it is our finding that Hardy discloses a baby bunting for temperature treatment of infant patients. The baby bunting is comprised of a cover that is supplied with fluid. layer of the bunting or cover provides a downwardly curved center 24 positioned where the babies neck would be located. We are in agreement with the examiner that it would have been obvious to provide a recess on the top edge of the cover of Roehr for the self-evident advantage of providing or accommodating the upper part of the body of a patient covered thereby. Appellants argue in the main brief at several locations on page 11 that the rejected claims define a recess in an inflatable structure. This is not the case. The claims merely require a non-inflatable portion defining a recess near a first end of the inflatable structure. By appellants' own claims the recess is near the end in the inflatable structure. Accordingly, this argument of appellants cannot be credited.

With respect to claims 37 through 39, the rejection of these claims is reversed for the reasons given with respect to claims 32 and 33.

As a final matter we have considered the declaration by Andreas Deibel. According to the declaration the use of a fibrous/plastic laminate structure provides success in solving a manufacturing problem in fastening thin plastic sheets together. Without the fibrous material the thin plastic adheres to the heat rollers during manufacturing. However, the declarant nowhere states that the success was unexpected, or even hints or alludes to the fact that this result was not foreseen or predicted in the prior art. As such the declaration does not make out a case for unexpected results as alleged in the brief on appeal and is, thus, entitled to but little weight.

Regarding the affirmed rejection(s), 37 CFR § 41.52(a)(1) provides "[a]ppellant may file a single request for rehearing within two months from the date of the original decision of the Board."

In addition to affirming the examiner's rejection(s) of one or more claims, this decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 CFR § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 CFR § 41.50(b) also provides that the appellant, <u>WITHIN</u>

TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

- (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .
- (2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

Should the appellant elect to prosecute further before the examiner pursuant to 37 CFR § 41.50(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the appellant elects prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

SUMMARY

The rejections of claims 20, 22, 25, 27, 29 through 30, 34 through 36 are affirmed.

The rejections of claims 21, 23, 26, 28, 31 through 33 and 37 through 39 are reversed.

A new rejection pursuant to 37 CFR 41.50(b) has been entered against claims 21 and 26.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR \$ 1.136(a).

AFFIRMED-IN-PART 37 CFR 41.50(b)

NEAL E. ABRAMS

Administrative Patent Judge

CHARLES E. FRANKFORT

Administrative Patent Judge

WLLIAM F. PATE III

Administrative Patent Judge

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